Author Index

Addiego, W.P., see Luchsiger, M.M. 229
Akgerman, A., see Luchsiger, M.M. 229
Albanesi, G., see Moggi, P. 285
Bagnasco, G., Ciambelli, P., Frezza, A., Galli, P., La Ginestra, A. and Turco, M.
Layered zirconium–tin phosphates. I. Chemical and physical characterization 55
Bagnasco, G., Ciambelli, P., Turco, M., La Ginestra, A. and Patrono, P.
Layered zirconium–tin phosphates. II. Catalytic properties in the oxydehydrogenation of ethylbenzene to styrene 69
Banerjee, R.K., see Sengupta, G. 1
Banerjee, S., see Sengupta, G. 1
Barbier, J., see Lamy-Pitara, E. 179
Blom, P., see Zeuthen, P. 117
Bozkurt, B., see Luchsiger, M.M. 229
Briot, P. and Primet, M.
Catalytic oxidation of methane over palladium supported on alumina: Effect of aging under reactants 301
Cadet, V., Raatz, F., Lynch, J. and Marcilly, Ch.
Nickel contamination of fluidised cracking catalysts: A model study 263
Calleja, G., De Lucas, A. and Van Grieken, R.
Cobalt/HZSM-5 zeolite catalyst for the conversion of syngas to hydrocarbons 11
Chakraborty, A., see Sengupta, G. 1
Choudhury, R.P., see Sengupta, G. 1
Chung, J.S., see Yun, H.G. 97
Ciambelli, P., see Bagnasco, G. 55
Ciambelli, P., see Bagnasco, G. 69
Cider, L. and Schöön, N.-H.
Kinetics of cross-desorption of carbon monoxide by the influence of ethyne over palladium/alumina 207
Cider, L. and Schöön, N.-H.
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at transient conditions over supported metal catalysts 191
Clerici, M.G.
Oxidation of saturated hydrobarbons with hydrogen peroxide, catalysed by titanium silicalite 249
Czakó-Nagy, I., see Vértes, Cs. 149
Darensbourg, M.Y., see Luchsiger, M.M. 229
Das, D.P., see Sengupta, G. 1
De Beer, V.H.J., see Mangnus, P.J. 161
De Lucas, A., see Calleja, G. 11
Derewinski, M., see Vinek, H. 277
Fierro, J.L.G., see Rodriguez-Ramos, I. 217
Frezza, A., see Bagnasco, G. 55
Galli, P., see Bagnasco, G. 55
Göbölös, S., see Vértes, Cs. 149
Guerrero-Ruiz, A., see Rodriguez-Ramos, I. 2 17
Janzen, C.P., see Luchsiger, M.M. 229
Kojima, M., see Schwarz, S. 81
La Ginestra, A., see Bagnasco, G. 55
La Ginestra, A., see Bagnasco, G. 69
Lamy-Pitara, E., Tainon, Y. and Barbier, J.
Modification of the catalytic properties of platinum by the adsorption of mercaptans 179
Lercher, J.A., see Vinek, H. 277
Luchsiger, M.M., Bozkurt, B., Akgerman, A., Janzen, C.P., Addiego, W.P. and Darensbourg, M.Y.
Direct synthesis of mixed metal sulfide catalysts and their hydrodenitrogenation activity 229
Luk'yanov, D.B.
Role of enhanced activity sites in methanol conversion over ZSM-5 zeolites L9
Lynch, J., see Cadet, V. 263
Mangnus, P.J., Van Langeveld, A.D., de Beer, V.H.J. and Moulijn, J.A.
Influence of phosphate on the structure of sulfided alumina supported cobalt–molybdenum catalysts 161
Marcilly, Ch., see Cadet, V. 263
Margitfalvi, J., see Vértes, Cs. 149
Massoth, F.E., see Zeuthen, P. 117
Mirth, G., see Vinek, H. 277
Moggi, P. and Albanesi, G.
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Moulijn, J.A., see Mangnus, P.J. 161
Muegge, B., see Zeuthen, P. 117
Nicolaides, C.P., Wapiennik, M., Weiss, K.I.G., Van den Akker, H., Van Zalk, B. and Wielaard, P.
Alkali metal cation exchange of HZSM-5 and the catalytic properties of the alkalized zeolites 31
O'Connor, C.T., see Schwarz, S. 81
Patrono, P., see Bagnasco, G. 69

Primet, M., see Briot, P. 301
Raatz, F., see Cadet, V. 263
Rigutto, M.S. and Van Bekkum, H.
Synthesis and characterization of a thermally stable vanadium-containing silicalite L1
Rodriguez-Ramos, I., Guerrero-Ruiz, A., Rojas, M.L. and Fierro, J.L.G.
Dehydrogenation of methanol to methyl formate over copper-containing perovskite-type oxides 217
Rojas, M.L., see Rodriguez-Ramos, I. 217
Ryckowski, J., see Vértes, Cs. 149
Sanyal, R.M., see Sengupta, G. 1
Schöön, N.-H., see Cider, L. 207
Schöön, N.-H., see Cider, L. 191
Schwarz, J.A., see Subramanian, S. 131
Schwarz, S., Kojima, M. and O'Connor, C.T.
Effect of stirring, extrusion and pelletisation on high pressure propene oligomerisation and xylene isomerisation over ZSM-5 81
Seimanides, S., Tsaikaras, P., Verykios, X.E. and Vayenas, C.G.
Oxidative coupling of methane over yttria-doped zirconia solid electrolyte 41
Sengupta, G., Chakraborty, A., Banerjee, S., Das, D.P., Choudhury, R.P., Banerjee, R.K. and Sanyal, R.M.
Solid–solid interaction and electronic properties of copper–zinc oxide catalysts 1
Subramanian, S. and Schwarz, J.A.
Stoichiometric composition of platinum, iridium and platinum–iridium catalytic precursors 131
Tainon, Y., see Lamy-Pitara, E. 179
Tála, E., see Vértes, Cs. 149
Tsaikaras, P., see Seimanides, S. 41
Turco, M., see Bagnasco, G. 55
Turco, M., see Bagnasco, G. 69
Van Bekkum, H., see Rigutto, M.S. L1
Van den Akker, H., see Nicolaides, C.P. 31
Van Grieken, R., see Calleja, G. 11
Van Langeveld, A.D., see Mangnus, P.J. 161
Van Zalk, B., see Nicolaides, C.P. 31
Vayenas, C.G., see Seimanides, S. 41
Vértes, A., see Vértes, Cs. 149
Vértes, Cs., Tála, E., Czakó-Nagy, I., Ryckowski, J., Göbölös, S., Vértes, A. and Margitfalvi, J.
Mössbauer spectroscopy studies of Sn–Pt/Al_2O_3 catalysts prepared by controlled surface reactions 149
Verykios, X.E., see Seimanides, S. 41
Vinek, H., Derewinski, M., Mirth, G. and Lercher, J.A.
Alkylation of toluene with methanol over alkali exchanged ZSM-5 277
Wapiennik, M., see Nicolaides, C.P. 31
Weiss, K.I.G., see Nicolaides, C.P. 31
Wielaard, P., see Nicolaides, C.P. 31
Woo, S.I., see Yun, H.G. 97
Yun, H.G., Woo, S.I. and Chung, J.S.
Study of iron/mordenite catalysts by Mössbauer and ferromagnetic resonance spectroscopy for carbon monoxide hydrogenation 97
Zeuthen, P., Blom, P., Muegge, B. and Massoth, F.E.
Temperature-programmed sulfidation and oxidation of Ni–Mo/alumina catalysts and reaction with ammonia 117

Subject Index

Acid sites
Alkylation of toluene with methanol over alkali exchanged ZSM-5 277
Acidity
Oxidation of saturated hydrobarbons with hydrogen peroxide, catalysed by titanium silicalite 249
Acidity
Layered zirconium–tin phosphates. II. Catalytic properties in the oxydehydrogenation of ethylbenzene to styrene 69
Active coke
Layered zirconium–tin phosphates. II. Catalytic properties in the oxydehydrogenation of ethylbenzene to styrene 69
Adsorption
Dehydrogenation of methanol to methyl formate over copper-containing perovskite-type oxides 217
Adsorption
Temperature-programmed sulfidation and oxidation of Ni-Mo/alumina catalysts and reaction with ammonia 117
Ageing
Catalytic oxidation of methane over palladium supported on alumina: Effect of aging under reactants 301
Aldol condensation
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Alkali ZSM-5
Alkylation of toluene with methanol over alkali exchanged ZSM-5 277
Basicity
Oxidation of saturated hydrobarbons with hydrogen peroxide, catalysed by titanium silicalite 249
Bimetallic catalysts
Direct synthesis of mixed metal sulfide catalysts and their hydrodenitrogenation activity 229
Bimetallic clusters
Stoichiometric composition of platinum, iridium and platinum-iridium catalytic precursors 131
Butyraldehyde
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Carbon monoxide
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at transient conditions over supported metal catalysts 191
Carbon monoxide
Kinetics of cross-desorption of carbon monoxide by the influence of ethyne over palladium/alumina 207
Carbon monoxide hydrogenation
Study of iron/mordenite catalysts by Mössbauer and ferromagnetic resonance spectroscopy for carbon monoxide hydrogenation 97
Catalyst characterization (adsorption, Mössbauer spectroscopy, TPR, TPS)
Influence of phosphate on the structure of sulfided alumina supported cobalt–molybdenum catalysts 161
Catalyst characterization (AES, CO adsorption, XPS)
Dehydrogenation of methanol to methyl formate over copper-containing perovskite-type oxides 217
Catalyst characterization (DRS, DTA, ESR, XPS)
Solid–solid interaction and electronic properties of copper–zinc oxide catalysts 1
Catalyst characterization (IR)
Direct synthesis of mixed metal sulfide catalysts and their hydrodenitrogenation activity 229
Catalyst characterization (Mössbauer spectrometry, FMR)
Study of iron/mordenite catalysts by Mössbauer and ferromagnetic resonance spectroscopy for carbon monoxide hydrogenation 97
Catalyst characterization (Mössbauer spectroscopy)
Mössbauer spectroscopy studies of Sn-Pt/Al_2O_3 catalysts prepared by controlled surface reactions 149
Catalyst characterization (NMR, ESR, EPMA)
Synthesis and characterization of a thermally stable vanadium-containing silicalite L1
Catalyst characterization (SEM)
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Catalyst characterization (TPR, TG)
Stoichiometric composition of platinum, iridium and platinum-iridium catalytic precursors 131

Catalyst characterization (TPS, TPO)
Temperature-programmed sulfidation and oxidation of Ni-Mo/alumina catalysts and reaction with ammonia 117
Catalyst preparation (citrate precipitation)
Dehydrogenation of methanol to methyl formate over copper-containing perovskite-type oxides 217
Catalyst preparation (co-precipitation, wet impregnation)
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Catalyst preparation (crystallization)
Synthesis and characterization of a thermally stable vanadium-containing silicalite L1
Catalyst preparation (extrusion, pelletization)
Effect of stirring, extrusion and pelletisation on high pressure propene oligomerisation and xylene isomerisation over ZSM-5 81
Catalyst preparation (incipient wetness)
Cobalt/HZSM-5 zeolite catalyst for the conversion of syngas to hydrocarbons 11
Catalyst preparation (precursors)
Stoichiometric composition of platinum, iridium and platinum-iridium catalytic precursors 131
Catalyst preparation (thermal decomposition, co-precipitation)
Solid–solid interaction and electronic properties of copper–zinc oxide catalysts 1
Catalytic sites
Role of enhanced activity sites in methanol conversion over ZSM-5 zeolites L9
Cobalt/zeolite
Cobalt/HZSM-5 zeolite catalyst for the conversion of syngas to hydrocarbons 11
Cobalt–molybdenum
Direct synthesis of mixed metal sulfide catalysts and their hydrodenitrogenation activity 229
Cobalt–molybdenum/alumina
Influence of phosphate on the structure of sulfided alumina supported cobalt–molybdenum catalysts 161
Controlled surface reactions
Mössbauer spectroscopy studies of Sn-Pt/Al_2O_3 catalysts prepared by controlled surface reactions 149
Copper/perovskite
Dehydrogenation of methanol to methyl formate over copper-containing perovskite-type oxides 217
Copper–zinc oxide
Solid–solid interaction and electronic properties of copper–zinc oxide catalysts 1
Cracking catalysts
Nickel contamination of fluidised cracking catalysts: A model study 263
Cross-desorption
Kinetics of cross-desorption of carbon monoxide by the influence of ethyne over palladium/alumina 207
Cross-desorption
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at transient conditions over supported metal catalysts 191
Electronic properties
Solid–solid interaction and electronic properties of copper–zinc oxide catalysts 1
Ethylbenzene oxydehydrogenation
Layered zirconium–tin phosphates. II. Catalytic properties in the oxydehydrogenation of ethylbenzene to styrene 69
Ethylhexenal
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Ethyne
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at transient conditions over supported metal catalysts 191
Ethyne
Kinetics of cross-desorption of carbon monoxide by the influence of ethyne over palladium/alumina 207
Fischer–Tropsch synthesis
Cobalt/HZSM-5 zeolite catalyst for the conversion of syngas to hydrocarbons 11
Gas-phase reactions
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Hexane cracking
Alkali metal cation exchange of HZSM-5 and the catalytic properties of the alkalized zeolites 31
Hydrocarbon oxidation
Oxidation of saturated hydrobarbons with hydrogen peroxide, catalysed by titanium silicalite

249
Hydrodenitrogenation
Direct synthesis of mixed metal sulfide catalysts and their hydrodenitrogenation activity 229
Hydrogen peroxide
Oxidation of saturated hydrobarbons with hydrogen peroxide, catalysed by titanium silicalite 249
Ion exchange
Alkali metal cation exchange of HZSM-5 and the catalytic properties of the alkalized zeolites 31
Iridium
Stoichiometric composition of platinum, iridium and platinum–iridium catalytic precursors 131
Iron/mordenite
Study of iron/mordenite catalysts by Mössbauer and ferromagnetic resonance spectroscopy for carbon monoxide hydrogenation 97
Kinetics
Kinetics of cross-desorption of carbon monoxide by the influence of ethyne over palladium/alumina 207
Layered phosphates
Layered zirconium–tin phosphates. I. Chemical and physical characterization 55
Layered phosphates
Layered zirconium–tin phosphates. II. Catalytic properties in the oxydehydrogenation of ethylbenzene to styrene 69
Low temperature oxidation
Oxidation of saturated hydrobarbons with hydrogen peroxide, catalysed by titanium silicalite 249
Maleic acid hydrogenation
Modification of the catalytic properties of platinum by the adsorption of mercaptans 179
Mercaptan adsorption
Modification of the catalytic properties of platinum by the adsorption of mercaptans 179
Metal poisoning
Nickel contamination of fluidised cracking catalysts: A model study 263
Methane oxidation
Catalytic oxidation of methane over palladium supported on alumina: Effect of aging under reactants 301
Methane oxidative coupling
Oxidative coupling of methane over yttria-doped zirconia solid electrolyte 41
Methanol conversion
Role of enhanced activity sites in methanol conversion over ZSM-5 zeolites L9
Methanol dehydrogenation
Dehydrogenation of methanol to methyl formate over copper-containing perovskite-type oxides 217
Model study
Nickel contamination of fluidised cracking catalysts: A model study 263
Mössbauer spectroscopy
Mössbauer spectroscopy studies of Sn-Pt/Al_2O_3 catalysts prepared by controlled surface reactions 149
Nickel
Nickel contamination of fluidised cracking catalysts: A model study 263
Nickel–molybdenum
Direct synthesis of mixed metal sulfide catalysts and their hydrodenitrogenation activity 229
Nickel–molybdenum–phosphorus/alumina
Temperature-programmed sulfidation and oxidation of Ni-Mo/alumina catalysts and reaction with ammonia 117
Niobium oxide
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Palladium/alumina
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at transient conditions over supported metal catalysts 191
Palladium/alumina
Kinetics of cross-desorption of carbon monoxide by the influence of ethyne over palladium/alumina 207
Palladium/alumina
Catalytic oxidation of methane over palladium supported on alumina: Effect of aging under reactants 301
Particle size
Catalytic oxidation of methane over palladium supported on alumina: Effect of aging under reactants 301
Phosphate
Influence of phosphate on the structure of sulfided alumina supported cobalt–molybdenum catalysts 161

Platinum
Stoichiometric composition of platinum, iridium and platinum-iridium catalytic precursors 131
Platinum
Modification of the catalytic properties of platinum by the adsorption of mercaptans 179
Platinum/alumina
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at transient conditions over supported metal catalysts 191
Poisoning
Alkali metal cation exchange of HZSM-5 and the catalytic properties of the alkalized zeolites 31
Poisoning
Modification of the catalytic properties of platinum by the adsorption of mercaptans 179
Propene oligomerization
Effect of stirring, extrusion and pelletisation on high pressure propene oligomerisation and xylene isomerisation over ZSM-5 81
Redox system
Synthesis and characterization of a thermally stable vanadium-containing silicalite L1
Rhodium/alumina
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at trasient conditions over sup - ported metal catalysts 191
Selectivity (alkenes)
Study of iron/mordenite catalysts by Mössbauer and ferromagnetic resonance spectroscopy for carbon monoxide hydrogenation 97
Selectivity (C_2 hydrocarbons)
Oxidative coupling of methane over yttria-doped zirconia solid electrolyte 41
Selectivity (C_{6+} hydrocarbons)
Cobalt/HZSM-5 zeolite catalyst for the conversion of syngas to hydrocarbons 11
Selectivity (methyl formate)
Dehydrogenation of methanol to methyl formate over copper-containing perovskite-type oxides 217
Silica
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Solid electrolyte
Oxidative coupling of methane over yttria-doped zirconia solid electrolyte 41
Solid solutions
Layered zirconium–tin phosphates. I. Chemical and physical characterization 55
Sulphiding
Influence of phosphate on the structure of sulfided alumina supported cobalt–molybdenum catalysts 161
Surface acidity
Layered zirconium–tin phosphates. I. Chemical and physical characterization 55
Steaming
Role of enhanced activity sites in methanol conversion over ZSM-5 zeolites L9
Syngas conversion
Cobalt/HZSM-5 zeolite catalyst for the conversion of syngas to hydrocarbons 11
Tantalum oxide
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Test reaction
Alkali metal cation exchange of HZSM-5 and the catalytic properties of the alkalized zeolites 31
Tin–platinum/alumina
Mössbauer spectroscopy studies of Sn-Pt/Al_2O_3 catalysts prepared by controlled surface reactions 149
Tin–zirconium
Layered zirconium–tin phosphates. I. Chemical and physical characterization 55
Titanium silicalite
Oxidation of saturated hydrobarbons with hydrogen peroxide, catalysed by titanium silicalite 249
Toluene alkylation
Alkylation of toluene with methanol over alkali exchanged ZSM-5 277
Transient hydrogenation
Competition between ethyne, ethene and carbon monoxide for the active sites during hydrogenation at transient conditions over supported metal catalysts 191
Tungsten oxide
Gas phase aldol condensation of n-butyraldehyde to 2-ethylhexenal 285
Vanadium-containing silicalite
Synthesis and characterization of a thermally stable vanadium-containing silicalite L1

Xylene isomerization
Effect of stirring, extrusion and pelletisation on high pressure propene oligomerisation and xylene isomerisation over ZSM-5 81
Zeolites
Role of enhanced activity sites in methanol conversion over ZSM-5 zeolites L9
Zeolites
Alkali metal cation exchange of HZSM-5 and the catalytic properties of the alkalized zeolites 31
Zeolites
Effect of stirring, extrusion and pelletisation on high pressure propene oligomerisation and xylene isomerisation over ZSM-5 81
Zeolites
Alkylation of toluene with methanol over alkali exchanged ZSM-5 277
Zeolites
Cobalt/HZSM-5 zeolite catalyst for the conversion of syngas to hydrocarbons 11
Zirconia–yttria
Oxidative coupling of methane over yttria-doped zirconia solid electrolyte 41
Zirconium–tin
Layered zirconium–tin phosphates. I. Chemical and physical characterization 55